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COMMENTARY

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Resources, relationships, and systems thinking should inform the way community health promotion is funded

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ABSTRACT

Public health agencies tasked with improving the health of communities are poorly supported by many 'business-as-usual' funding practices. It is commonplace to call for more funding for health promotion, but additional funding could do more harm than good if, at the same time, we do not critically examine the micro-processes that lead to health enablement – micro-processes that are instigated or amplified by funding. We are currently engaged in a university-and-policy research partnership to identify how funding mechanisms may better serve the practice of community-based health promotion. We propose three primary considerations to inform the way funds are used to enable community-based health promotion. The first is a broader understanding and legitimising of the 'soft infrastructure' or resources required to enhance a community's capacity for change. The second is recognition of social relationships as key to increasing the availability and management of resources within communities. The third consideration understands communities to be complex systems and argues that funding models are needed to support the dynamic evolution of these systems. By neglecting these considerations, current funding practices may inadvertently privilege communities with pre-existing capacity for change, potentially perpetuating inequalities in health. To begin to address these issues, aspects of funding processes (e.g., stability, guidance, evaluation, and feedback requirements) could be designed to better support the flourishing of community practice. Above all, funders must recognise that they are actors in the health system and they, like other actors, should be reflexive and accountable for their actions.

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Introduction

In the UK, 150 disadvantaged communities have been given £1 million each by the National Lottery Community Fund to improve their health and well-being. But the *Big Local* project is not just about (what might seem like) an eye-watering amount of money. Of interest is that residents themselves have been enabled to make the decisions about how best to use the funds (Local trust, n.d.). Both factors might be important in bringing about success (Reynolds et al., 2015). While the evaluation of *Big Local* continues, the landmark experiment challenges those of us outside, and researchers everywhere, to think critically about funding as a lever for change and the opportunities to increase its reach and value. Funding alone may prove insufficient to bring about whole community improvement. A critical combination of

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conditions, sequences, and processes may need to be present to ensure that money acts as an asset rather than a burden.

We are currently engaged in a collaborative university-and-policy research partnership with a state health department in Australia. We are using reflection-and-action methods with funding decision-makers, seeking to improve the way funding mechanisms serve the practice of community-based health promotion. Our aim is to critically analyse how funding interacts or 'couples' with context (Hawe et al., 2009). This involves interrogating the pre-existing and co-incident factors that might be useful in maximising gains from funding, and in ensuring benefits are distributed equitably. By funding, we mean the intentional transfer of money from one agency (the appropriating agency) to another (the provider agency) for the purposes of promoting health. This transfer could be from one level of government to another, from government to non-government organisations, or from philanthropic sources to government or non-government entities. The task of funding community-based interventions is not simple. Even seemingly straightforward health-enhancing activities, such as efforts to increase vaccination rates, depend for their effectiveness on levels of literacy, scientific knowledge, and trust in public institutions (European Centre for Disease Prevention and Control, 2012). The task of mobilising community engagement and support to tackle contemporary health challenges such as drug and alcohol misuse, domestic violence, or obesity may be far more challenging.

Internationally, health promotion is funded in multiple ways from a myriad of sources. Each funding initiative can be associated with different time frames, objectives, and conditions attached to the allocation of funds (Institute of Medicine, 2012; World Health Organization, 2007). Funding is rarely stable or predictable over time and even government funding can vary substantially from year to year, often with adverse consequences for the public's health (Institute of Medicine, 2012). New funding initiatives are often short-lived and sporadic, with an emphasis on small-scale projects to meet specific programmatic objectives (Lovell et al., 2015). Furthermore, poorly considered funding schemes can often undo the beneficial effects of past investment (Baum et al., 2016). Funding can even worsen health inequalities by inadvertently privileging communities with the pre-existing capacity to find, secure, and utilise new sources of support (Institute of Medicine, 2012). Uncertainty and variability in funding are common (Roussy et al., 2019; Witter et al, 2007). Many funding schemes require a focus on innovation, which can encourage time-sapping repackaging of existing interventions rather than rational, long-term planning for the sustainability or spread of good practices (Hawe, 2015).

For almost 30 years, health promotion scholars have been exploring how best to sustain effective public health programs following the end of pilot funding – assuming that funding is, of necessity, short-lived (see, for example, Bracht et al. (1994) and Steckler et al (1989)). Lack of sustained funding might still be the current political reality of health promotion. It does not have to be accepted. But concern with *how much* should be spent on promoting the public's health is possibly overshadowing consideration of the variety of processes for health improvement that funding is in a unique position to enable (Leider et al., 2018). Once made visible these processes might be scripted better and adapted so that any amount of funds (eye-watering amounts or not) are used well.

This is a discussion paper, based on insights from the early stages of our work. We outline three primary considerations for funding health promotion. The first consideration is the need for a broader appreciation of the range of resources required to enhance a community's capacity for change. The second involves recognising social processes and social relationships as the basis for the generation, diffusion, and optimal management of resources. The third requires an understanding that communities are complex systems. Taken together, these three factors point to the need for a better understanding of how external funding, and the mechanisms used to allocate and manage it, affects the ability of community organisations and agencies charged with promoting health to carry out their jobs. We suggest that a complex systems approach, together with a focus on critical resources and social relationships, provides the basis for a (formal) funding model for health promotion better suited to dealing with community health challenges. In the final section of the paper, we consider implications for funding strategy and policy. A funding model is the logic and strategy of using funds to build health improvement. We distinguish this from a financing model,

which we take to mean the strategy to build reliable revenue sources (e.g., through a sales tax on sugar or tobacco).

A deeper understanding of resources

Resources are the raw materials that provide the basis for communities and individuals to function effectively *and* to engage in processes of change. Without the necessary resources to support processes of change and sustain new patterns of functioning communities cannot evolve and adapt, and external efforts to improve the health of communities are likely to fail (Trickett, 2009).

External funding often focuses on the acquisition of the material and human resources needed to deliver programs or conduct other health-promoting activities. These are vital for communities, particularly disadvantaged communities (Marmot et al., 2010). But these resource types rarely reflect the full needs of communities to undertake change. A wider view of resources is required.

Broadly conceived, resources are *all* of the things that communities need to function effectively and to undertake change (Center for Community Health Development, 2019; Trickett et al., 1985). In addition to the usual factors of production (labour and capital), this view recognises the importance of social, relational, moral, cognitive, and emotional resources (Edwards et al., 2004; Foa et al., 2012; Hobfoll et al., 1993). These additional resources are an extension of Duhl's (1986) notion of 'soft infrastructure', without which a community's resilience is significantly diminished. Soft infrastructure takes many forms: it includes hope and trust (Moore et al., 2017); narratives of identity and world-view (Rappaport, 1995); safe spaces (Campbell et al., 2007); self-efficacy (Bandura, 2004); governance (Evans et al., 2015); and cultural symbols (Bourdieu et al., 1977). Resources such as these are crucial for development and improvement in communities. Culture and identity provide the basis for marginalised groups to build capacity and to sustain and participate in successful programs (Morley, 2015; Stewart, 2005). Safe spaces allow community members to engage with difficult issues and work collectively to overcome obstacles and translate new knowledge into action (Campbell et al., 2007). Individual and community narratives motivate and sustain action for change (Rappaport, 1995), while trust is a precondition for engaging in collective processes (Kawachi et al., 2014; Ostrom, 2000).

Such 'soft' resources are no less essential than the material resources usually associated with funding initiatives, but they are characteristically different. One cannot buy the acquisition of hope or trust or collaborative capacity in the same way that one can pay for the acquisition of staff. Instead, where funding is required, it must be provided in ways that support the local capacity-building actions of front line staff and enhance (and not displace) the processes through which hope and trust et cetera are generated. This requires awareness on the part of the funding bodies of geographic and social differences in pre-existing levels of soft infrastructure and community readiness for change, as well as funding mechanisms that are sensitive to the different demands such variation in readiness places on front line health promotion practitioners. Such awareness and sensitivity would enable funding initiatives to be better aligned with local efforts to develop or maintain soft infrastructure and reduce the likelihood that external funds divert attention and resources away from well-founded local priorities.

The role of social relationships

Agency arises, collectively, through dialogue and engagement in the context of social relationships (Campbell, 2014; Freire, 2005; Vaughan, 2014). Social relationships are a special class of resources in processes of community change (Edwards et al., 2004; Stewart, 2005; Valente, 2012; Valente et al., 2015). Within communities, social relationships take multiple forms including informal social networks, formal and informal groups, and organisations. The nature of the ties that connect (or fail to connect) individuals within each of these network forms will also vary. The resulting structures, as reflected in the patterns created by the ties that exist among network members, play an important role in processes of change by impacting on resource availability and management.

Network structures impact on the availability and value of resources in communities in two ways (Borgatti et al., 2011). First, the ties among community members act as conduits or pipelines that influence the dissemination of resources throughout the community. Communities with diverse networks are likely to have a greater propensity for change over time because of their relative openness to new ideas and knowledge (Granovetter, 1973; Griffith et al., 2008; Monge et al., 2003). In contrast, communities with denser, more closed connections are better able to coordinate the use of resources, potentially reducing duplication and waste (Nowell, 2009). In both cases, the value of any resource travelling through the network is enhanced if it moves through established relationships or through key individuals in the network because of the additional meaning and legitimacy this conveys to subsequent recipients (Hawe et al., 2009; Valente, 2017).

Secondly, the community's ability to secure and exercise power and control over resources (whether they are provided externally or generated from within) is a function of the bonds that exist between its members. This enables some groups to work collaboratively in their common interest to redress or reinforce power differences. Borgatti et al. (2011) refer to unionisation among employees to illustrate this point, but one sees it also in Ostrom's (1990) work examining how social relationships provide the basis for effective management of collective resources and in the discussion by Edwards et al. (2004) on how social relationships help to convert individual resources into collective resources to sustain collective action. Social bonds provide the basis for the generation of much of the soft infrastructure within communities (Freire, 2005; Kawachi et al., 2014; Stewart, 2005).

However, collaborative bonds can lead to differential outcomes across a network. For example, network power can be used to usurp the aims of externally funded health-promotion initiatives, and resources may be mismanaged if local decision-making and governance capacities are weak or non-existent. To complicate matters further, networks that encourage or support unhealthy behaviours may also provide positive benefits to network members such as social support, recognition, and status (Dolan, 2014; Flores et al., 2013; Lohan, 2007). A central focus of community development and capacity building, therefore, becomes the creation of relationships, where links are absent or otherwise not achieving community needs (Held et al., 2020). For these issues to be detected and managed, health workers need funding to be constantly 'on the ground'. This work can be funded as a responsibility of a health promotion practitioner (Crisp et al., 2000).

These dynamics also illustrate that a more diverse and sophisticated notion of networks is needed so that funding processes look beyond the current emphasis simply on 'partnerships' and gaining letters of support. Indeed, the ability to muster quick partnerships and letters of support has been criticised as evidence that those who need funds are least likely to get them (Mowbray, 2005).

Communities as complex systems

The third consideration of funding processes is to recognise that communities are complex adaptive systems. Resources and relationships are both part of systems thinking. In the Foreword to 'Governance for health in the 21st century', the World Health Organization's Regional Director for Europe, Dr Zsuzsanna Jakab, writes that: 'Pathways to good and poor health can be nonlinear and hard to predict, and health is increasingly understood as a product of complex, dynamic relationships among distinct types of determinants' (Jakab, 2012, p.vi). We are unlikely therefore to design effective public health interventions for contemporary problems or implement them successfully with reductionist thinking and simple 'cause and effect' conceptualisations of change (Fink et al., 2017; Heitman, 2017). Our intervention design and delivery strategies need to be cognisant of the fact that communities are complex, dynamic systems (Hawe et al., 2009; Matheson et al., 2018; Shiell et al., 2008). It follows that the funding mechanisms we adopt to support those strategies also need to be cognisant of the special demands made by systems thinking.

Space precludes an extensive discussion of the full insights offered by systems thinking. However, two of the critical features in Jakab's succinct statement about the pathways to good health can be

used to illustrate the funding implications of systems thinking for public health practice. The first of these is that health improvement is non-linear, which just means that there is not always a proportionate dose-response relationship between intervention intensity and outcome. Instead, many health improvement efforts demonstrate threshold effects or phase transitions or, in more popular language, tipping points (Gladwell, 2002). Such quantum changes are seen at both the individual level with lifestyle behavioural change regarding tobacco use for example (Resnicow et al., 2008; Resnicow et al., 2006), and at the policy level as illustrated by the introduction of gun control laws in Australia (Chapman, 2013; Peters, 2013). In such cases, the outcome of interest appears resistant to any effort to improve it until some critical combination of factors comes together and a transformative change occurs. Individuals suddenly quit smoking, and countries adopt gun control legislation that previously they had resolutely opposed.

In these circumstances, it is tempting to attribute the desired change in behaviour or policy to the events or actions that immediately preceded the change. But such proximal reasoning ignores the prior actions and advocacy that had diligently prepared the ground. Smokers who 'just decide' to stop smoking overlook their past failed quit attempts and their years of exposure to anti-smoking messaging. The Australian gun laws were enacted in the wake of the Port Arthur massacre but followed many years of research and sophisticated advocacy by public health experts (Peters, 2013).

Jakab's second observation is that health improvement occurs in a dynamic, ever-changing context. Hence, it does not make sense to think about 'solving' public health problems. Rather, public health professionals seek to improve situations whilst remaining ever diligent to the certainty that threats to population health will recur. One sees this most obviously in the emergence of new biological threats, such as SARS-CoV-2, and the re-emergence of old ones such as tuberculosis. But the same underlying processes of adaptation and re-emergence happen more generally: in the cyclical effects of the economy and the recurrent imposition of austerity measures (Stuckler et al., 2017), in the responses of the tobacco industry to public health policies (World Health Organization, 2009), in the efforts of the gun lobby to pull back gun control legislation, and with lobbyists more generally looking to repeal or resist public health regulation or legislation where it is contradictory to well-funded private interests (Cave et al., 2014; Rennie, 2018).

Practitioners spend time nurturing and developing the soft infrastructure that enables a community's resilience to such recurring issues. They often focus on the most urgent needs and in doing so create in-roads for the main (funding-led) activity; they work in and around existing networks to mobilise resources to build bridges where important connections are absent and they remain alert to the emergence of counterforces. This occurs even while they are funded to address conventional health problems, such as obesity prevention (Groen et al., 2020).

This type of practice does not rule out the use of program logic models, but it does mean that these models need to be frequently adjusted to remain relevant in the face of dynamic change. For example, interim milestones should refer less to the achievement of pre-determined intermediate outcomes and more to the iterative processes of exploring what works in context (Rogers, 2008). Under these circumstances, funding mechanisms which reward rash promises about health improvement, or rely on the achievement of predictable quarter-by-quarter targets are deluded. Researchers in international health and development are especially conscious of many of these issues. They observe that funders tend to create overly structured processes which preference 'siloed' actions, shying away from making the complex changes to the social and economic fabric that are needed (Panter-Brick et al., 2014).

What this thinking offers funding strategy and policy

While there is a well-developed literature on community readiness assessment and technical capacity building: essentially preparing communities to take on the responsibility of funds for implementing particular evidence-based programs (Chinman et al., 2016), our interest is more in the development and nurturing of generic pre-conditions and evolving change processes that affect the impact of *any* funding initiative. More particularly, our interest is in the ongoing adjustment of

funding processes to better support health promotion practice, rather than just the (pre) readying of communities. While our work is still in progress, we can outline some areas of investigation we are pursuing in response to the ideas laid out in this paper.

First, the resources that a community has and the resources that a project proposal aims to develop can be listed and described, and proposers might be asked to consider critical resource combinations that need to be in place to maximise impact. Investigative work of this kind could be funded. Beyond the conventional understanding of skills and materials, extra attention would need to be given up front to the 'soft infrastructure', thus encouraging awareness of it at a community level. For example, a creative arts project, such as the production of a play, may be put forward for event funding. Typically, the project might be posed as a way to reduce anxiety and develop the talents and abilities of youth. This would be stated along with the estimated audience reach. However, with encouragement, the play might also be understood as a way to seek out, understand, and build the (additional) resource of narrative identity (Rappaport, 1995). Thus, extra advice and incentive in the funding guidelines might help to identify, legitimise, and strengthen resources that might be otherwise overlooked or taken-for-granted.

From a social network and relationship perspective, funding could consider not just partnerships and support as mentioned before, but how the opportunity and advantages provided by funding would be distributed. In health promotion, it is repeatedly observed that those who need the activities least gravitate to them the most, and those agencies with resources attract resources (Wharf-Higgins et al., 2008). So, the opportunity could be taken to ask project-proposers to consider how these possibilities would be recognised and overcome. Respondent-driven sampling methods (originally designed and used to reach marginal populations like drug users) could be adopted to reach people and organisations on the network periphery (Heckathorn, 1997). A social network perspective would also call for reporting on not just the first-order changes brought about by the injection of funds (among those reached by the program or activity) but some account could be required of the second and third-order changes. That is, how those reached by the intervention subsequently used the resources it created (e.g., knowledge, ideas, trust) in their own networks, and so on. The focus should be on demonstrating how resources are transformed through networks (Hawe et al., 2009), thus evaluating the on-the-ground time and skill committed by practitioners to coach processes of network change.

Systems thinking is already influencing how health promotion is practised and evaluated (Allender et al., 2019; Joyce et al., 2018; Matheson et al., 2018; Rosas, 2017), but it has not largely altered how health promotion is funded. The way funders recognise and appraise the value of efforts in the field is rarely any different from the process applied to conventional health promotion. Efforts to fund whole of community, systems-thinking health promotion (including 'signature' strategies such as system mapping and 'safe to fail' experimentation) may be deemed too risky by state governments because of the unpredictability of outcomes and its inability to fit with conventional accountability monitoring. It does not help that systems thinking has become somewhat of a mantra: the key precepts are repeated among the followers, but the practical consequences of it remain unconvincing to many health policymakers (Wutzke et al., 2016). This scepticism is the main challenge.

The first response must be to build reliable information on what is being explored, tried, and achieved, and the learning and logic that comes from that (Rogers, 2008). It is an unfortunate irony that the 'era' of systems thinking is overlapping with the current era of problem-focused targeted funding. The building of soft infrastructure in communities is likely being under-reported, under-recorded, and undervalued because few funding authorities are paying to hear about it. System thinking practice employed *within* targeted or siloed problem-defined funding is legitimate and reported (Bagnall et al., 2019). But the point is, practitioners whose focus is relationship and/or equity oriented are often drawn to problems in communities that are more immediate than those that are typically identified as state or national priorities (Groen et al., 2020) and their story is not being told. To gain insight into how the dynamic-evolution of community systems could unfold, funders need to

devise more free-form ways of reporting process, with indicators that are relevant to practice and more neutral to 'what' was paid for or intended.

A clear conclusion from our reflections to date is that funders would be wise to provide salaries for constant 'on-the-ground' workers whose job it is to connect agencies, build relationships, identify assets, and align and coordinate activity. That is, someone whose job it is to attend to the building and management of soft infrastructure and the coaching and reporting on system change. But there are other implications to explore for the future. These include ideal funding amounts, sequencing, timing, time frames, the role of field reports, and criteria for interpreting success and failure, especially in the short-term. A particular challenge will be the ability to recognise progress-in-the-making because complex adaptive system change is probabilistic, rather than deterministic. That is, a practitioner's responsibility is less about giving direction (and making predictions) and more about encouraging different parts of the system to interact so as to maximise the chance that the path forward will be found among new resource and relationship combinations (Resnicow et al., 2008). Funders are not necessarily antithetical to these ideas. Indeed, the most innovative among them are attempting to orient their processes towards 'learning partnerships' with communities, where the discovery of practice-based knowledge is a shared priority of both funders and grantee (Marsh et al., 2008).

Some lessons for funding communities may be analogous to those derived from the study of cash transfers to individuals to address the social determinants of health where there is growing literature on how context-levels factors inhibit, enable, or optimise the effect of money per se (Akresh et al., 2016; Handa et al., 2014; Owusu-Addo et al., 2019). In other words, funders of community health need to orchestrate, scrutinise, and constantly revise how they bring about change with a wider and more context-sensitive appreciation of what can be achieved, when and how.

Conclusion

Funders are actors in the health system and should be reflexive and accountable for their actions. The amount of funds, the frequency, and the conditions and evaluation requirements stipulated by funders for public health interventions instigate micro-processes of community response that might privilege some outcomes over others. We ask for more investigation and critical analysis of funding processes as levers for change in local community systems.

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